DIGITAL PHYSICIAN
Eye-Level Scale
Model 6437 Series
Operating Instructions

0033-M114-O1 Rev F
10/12

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DIGITAL PHYSICIAN EYE-LEVEL SCALE

Thank you for purchasing our Detecto Digital Physician Eye-Level Model 6437 Series Scale. It has been manufactured with quality and reliability at our factory in Webb City, MO USA. Your scale has been tested before leaving our factory to insure accuracy and dependability for years to come.

This manual is provided to guide you through the operation of your scale. Please read it thoroughly before attempting to operate your scale and keep it handy for future reference.

SPECIFICATIONS

Capacity ……..……..……	6437, 6437DHR, 6439, 6449: 550 lb x .2 lb (250 kg x .1 kg) 6439M, 6449M: 550 lb x .2 lb (250 kg x .1 kg) 6437KG, 6437KGDHR, 6439KG: 250 kg x .1 kg 6438, 6447: 550 lb x .2 lb
Platform Size ……..…...	10.5” x 14.5” (27 cm x 37.5 cm)
Shipping Weight ……..…	6437, 6437DHR: 35 lb (15.4 kg) 6439, 6439M: 38 lb (17.2 kg) 6449, 6449M: 46 lb (20.8 kg)
Scale Height ……..	59” (150 cm)
Height Rod Measures …..	6437DHR: 43” to 78” (110 cm to 200 cm) x inch/cm 6439, 6449: 30” to 78” (76 cm to 200 cm) x inch/cm 6439M, 6449M: 30” to 78” (76 cm to 200 cm) x 1/4 inch/1mm
Display ……..…..	Weight: Five digit, seven segment, 1/2” (13 mm) high LCD Height: Four digit, seven segment, 3/8" (10 mm) high LCD
Power …….....	6 “C” cell Alkaline, Ni-Cad or NiMH batteries (*not included*) *OR* an optional 100 to 240 VAC 50/60Hz 12 VDC 1A wall plug-in UL/CSA listed AC power adapter (Cardinal part number 6800-1045).
Keyboard	Membrane type with 19 keys, On/Off, Lock/Release, Units, Zero, Net/Gross, Tare ID/Height, Print/Enter and 0-9 Numeric Keys

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Serial Number_____

Date of Purchase _____

Purchased Form_____

_____

_____

RETAIN THIS INFORMATION FOR FUTURE USE

PRECAUTIONS

Before using this instrument, read this manual and pay special attention to all "WARNING" symbols:

IMPORTANT

ELECTRICAL WARNING

UNPACKING INSTRUCTIONS

- Remove scale from carton by lifting up with equal force from column and platform base.
- Check for any damage incurred in shipping. If scale has been damaged, place a claim with the carrier. Use the original carton and shipping material to return the scale.
- Remove all plastic wrapping, foam fillers and cardboard material from the scale.
- Carton contents:

    1) Column
    2) Indicator
    3) Platform base
    4) Screws and lock washers
    5) Hand post - optional
    6) Height measuring rod - optional
    7) Wheels - optional

NOTE! If column bracket is bent, straighten before assembling.

ASSEMBLY INSTRUCTIONS

Refer to Figures No. 1, 2, 3, and 4, then follow the instructions for scale assembly.

1. Carefully remove load cell and draft rod assembly from column.

   IMPORTANT! Handle load cell assembly with care! Do not drop, bend or twist.

2. Slip column over column bracket on platform base. Screw column to column brackets (two 1/4 truss head screws in front of column and four in the back). See Figure No. 1.

3. Referring to Figure No. 2, remove both #10-32 Truss Head Screws and lock washers securing the indicator bracket to the column.

4. Lower load cell and draft rod assembly into column. Draft Rod must pass through opening in column bracket. Referring to Figure No 1, make sure open end of lower draft rod hook is facing forward toward platform.

5. Next, referring to Figure No. 3, fasten top hook bolt of load cell assembly (C) to column. Make sure the load cell assembly does not touch the sides of column.

6. Slide grommet away from load cell assembly and slide into slot on column. **NOTE!** The slot should be on back (wide side) of column.

7. Pull excess load cell cable in column leaving enough slack in cable so as not to have any side pull on load cell.

8. Place digital indicator bracket on column and attach with 2 (#10-32) truss head screws and lock washers removed in step 3. See Figure No. 2.

9. Using a desk or table, lay down scale with column horizontal to floor. Raise draft rod keeping out of lever's way. Push lever. When lever is in position, hook draft rod around pivot. See Figure No. 4.

10. Attach indicator to indicator bracket on column, then connect load cell cable to back of indicator. Refer to the 758C Owner’s Manual, 8555-M210-O1 for additional information.

11. Scale is now ready for operation.

ASSEMBLY INSTRUCTIONS, CONT.

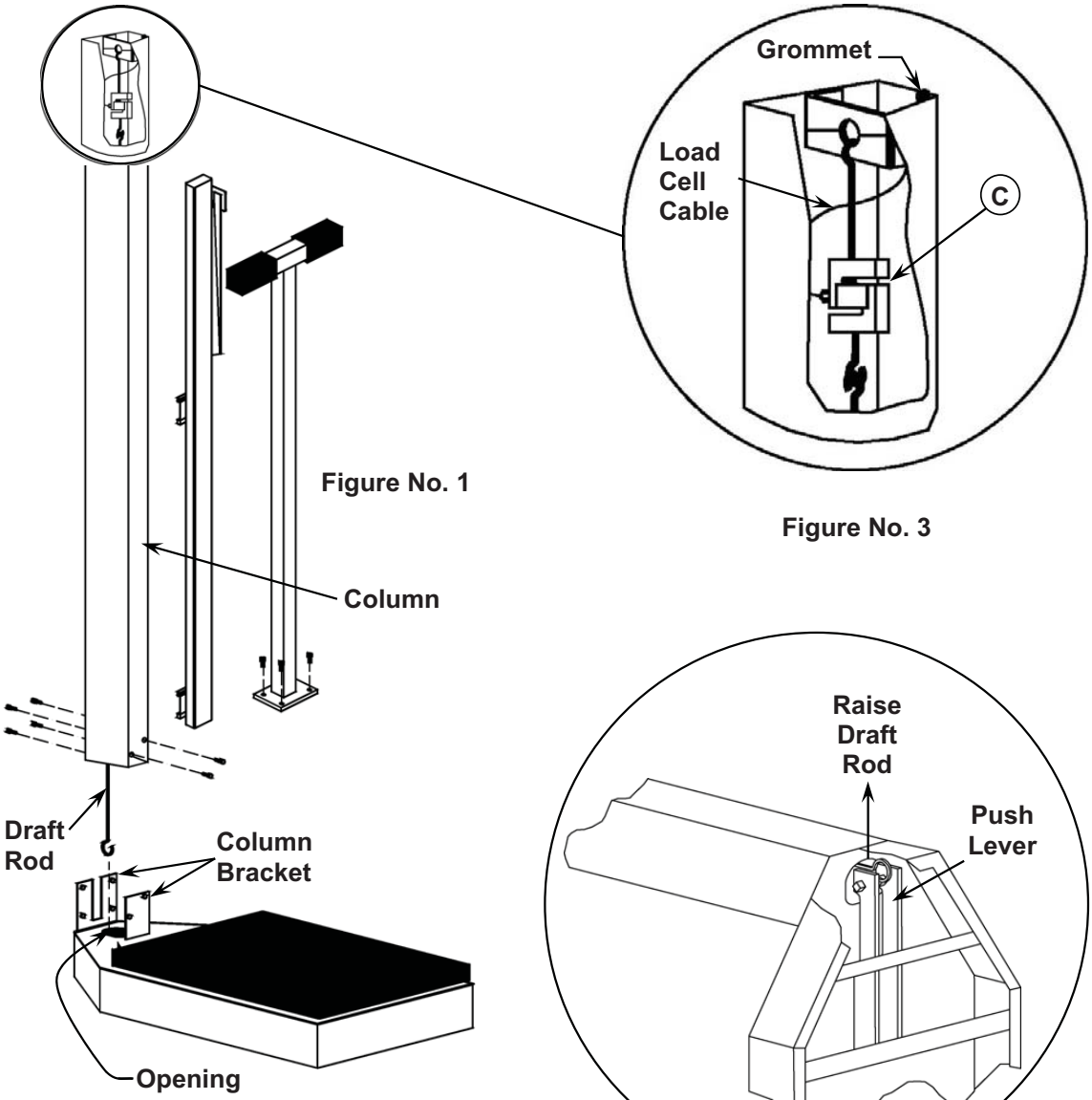


Figure No. 1

Figure No. 3

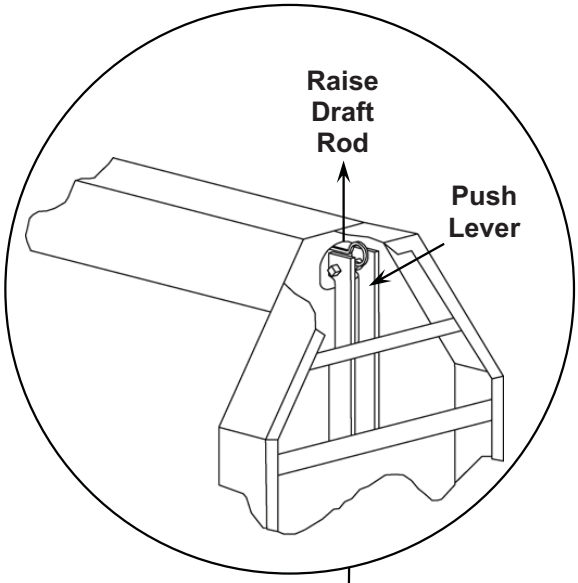


Figure No. 4

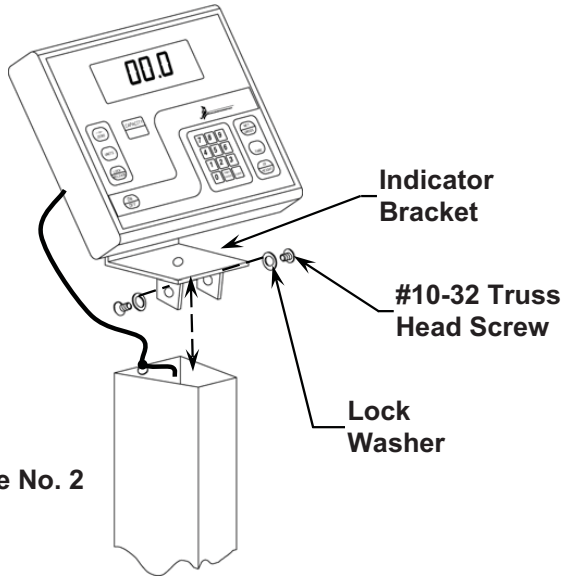
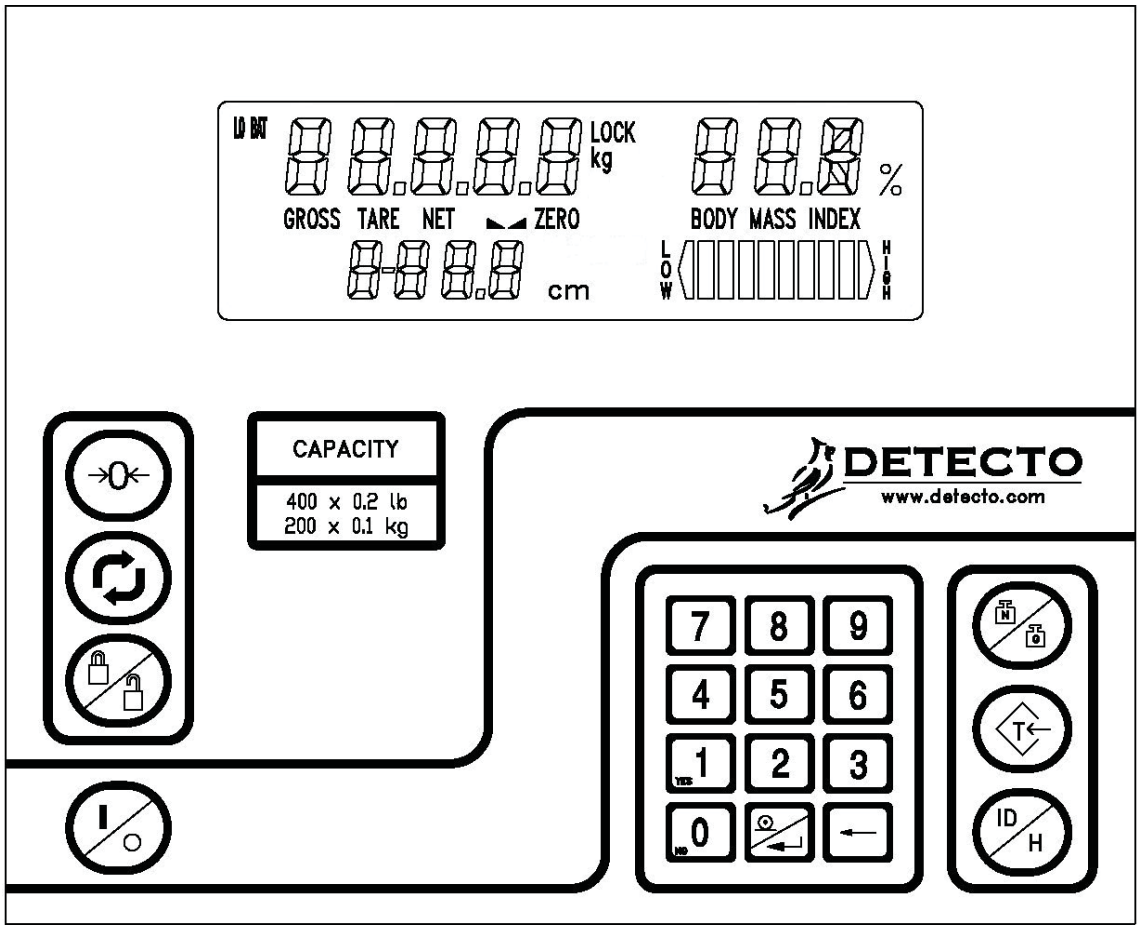


Figure No. 2

OPERATION



758C Keypad

Basic Operation

To Weigh

1. Press **ON/OFF** key to turn indicator on.
2. Press **ZERO** key to zero weight display. ZERO, GROSS and lb, oz, kg or ST annunciator will turn on to show that the scale is ready for use.
3. Place patient on scale and read weight display.
4. If a printer is connected to scale, press **PRINT/ENTER** key to print a ticket.
5. Remove patient from scale.

Zero Weight Display

1. In Gross Weight mode (GROSS annunciator on), press **ZERO** key.
2. Weight display will return to zero. ZERO and STABLE ◣◢ annunciators will turn on to show a stable, center-of-zero gross weight condition.

Metric Conversion

Press **UNITS** key to toggle between pounds and kilograms. Note that the lb or kg annunciator will turn on to show the weighing unit selected.

OPERATION, CONT.

Basic Operation with ID – (No BMI)

To Weigh

1. Press **ON/OFF** key to turn indicator on.
2. Press **ZERO** key to zero weight display. ZERO, GROSS and lb, oz, kg or ST annunciator will turn on to show scale is ready for use.
3. Press **ID/HEIGHT** key.
4. Display will change to show id=.
5. Using numeric keys, key-in up to an 11 digit identification number.
6. Press **PRINT/ENTER** key.
7. Place patient on scale
8. Read weight display.
9. If a printer is connected to scale, press **PRINT/ENTER** key to print a ticket.
10. Remove patient from scale.

Body Mass Index (BMI) Operation – (No ID)

To Weigh and Calculate BMI

1. Press **ON/OFF** key to turn indicator on.
2. Press **ZERO** key to zero weight display. ZERO, GROSS and lb, oz, kg or ST annunciator will turn on to show scale is ready for use.
3. Perform tare operation if required. Refer to Push Button Tare or Tare Weight Entry in previous section for instructions on using tare.
4. Place patient on the scale and then press **ID/HEIGHT** key.
5. If Feet-Inches were selected in setup for height measurement, display will change to show FEEt=.
    a. Use numeric keys to enter 1 digit for height in feet, then press **PRINT/ENTER** key.
    b. Display will change to show inCH=.
    c. Use numeric keys to enter up to 3 digits (# # . #) for height in inches and then press **PRINT/ENTER** key or press **PRINT/ENTER** key if no inches are required.
6. If Centimeters was selected in setup for height measurement, display will change to show Cm=_.
    a. Use numeric keys to enter up to 4 digits (# # # . #) for height in centimeters and then press **PRINT/ENTER** key.
7. Read weight and BMI displays.
8. If a printer is connected to scale, press **PRINT/ENTER** key to print a ticket.
9. Remove patient from scale.

OPERATION, CONT.

Body Mass Index (BMI) Operation with ID

To Weigh and Calculate BMI

1. Press **ON/OFF** key to turn indicator on.
2. Press **ZERO** key to zero weight display. ZERO, GROSS and lb, oz, kg or ST annunciator will turn on to show scale is ready for use.
3. Press **ID/HEIGHT** key.
4. Display will change to show id=.
5. Using numeric keys, key-in up to an 11 digit identification number.
6. Press **PRINT/ENTER** key.
7. Place patient on scale.
8. Press **ID/HEIGHT** key.
9. If Feet-Inches were selected in setup for height measurement, display will change to show FEEt=.
    a. Using numeric keys, enter 1 digit for height in feet and then press **PRINT/ENTER** key.
    b. Display will change to show inCH=.
    c. Using numeric keys enter up to 3 digits (# # . #) for height in inches and then press **PRINT/ENTER** key or press **PRINT/ENTER** key if no inches are required.
10. If Centimeters was selected in setup for height measurement, display will change to show Cm=_.
    a. Using numeric keys enter up to 4 digits (# # # . #) for height in centimeters and then press **PRINT/ENTER** key.
11. Read weight and BMI displays.
12. If a printer is connected to scale, press **PRINT/ENTER** key to print a ticket.
13. Remove patient from scale.
14. Press **NET/GROSS** key to return to Gross weight mode.
15. Press **ZERO** key. This will reset tare weight to zero.
16. BMI display and ID will clear when weight returns to zero.

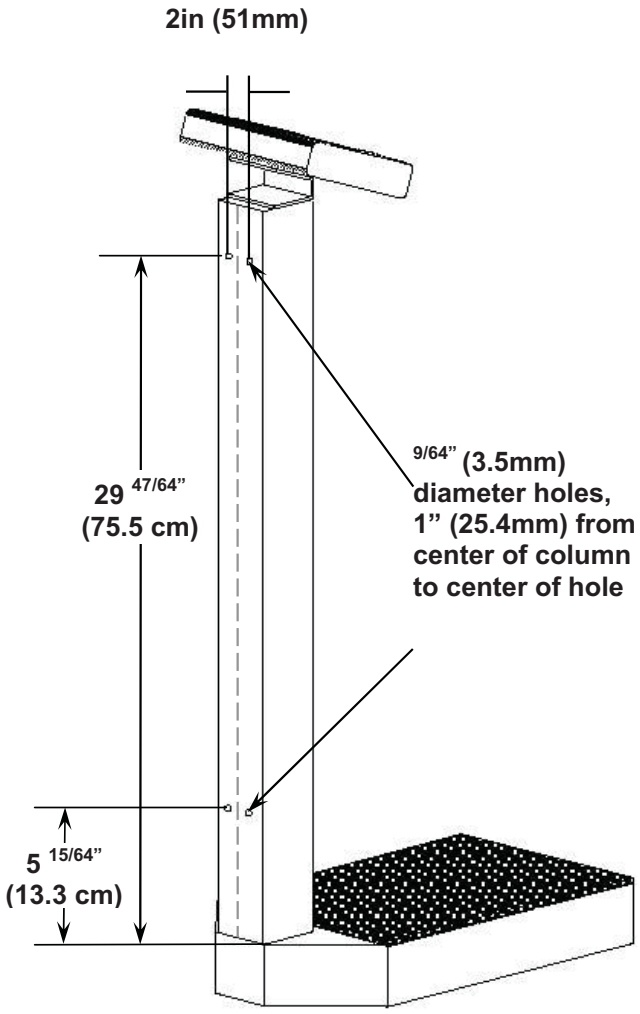
HEIGHT ROD INSTRUCTIONS

Height Rod Hole Location

Please check the Height Rod hole locations before installing the Height Rod.

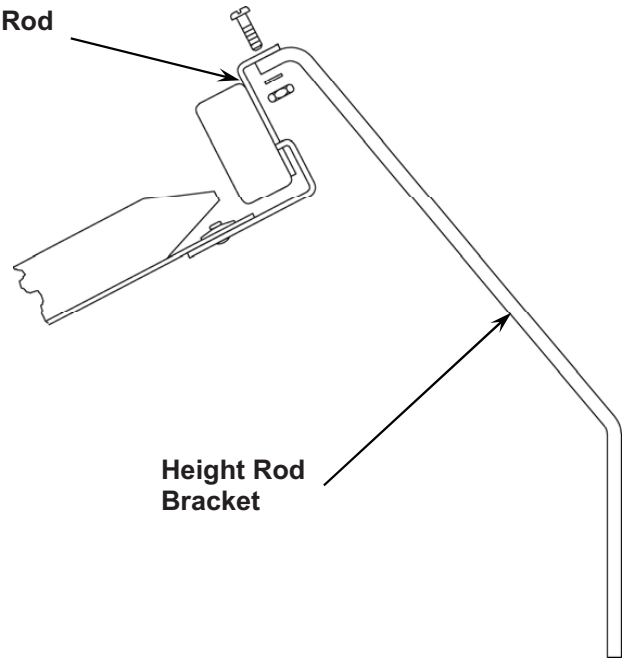
- **Some scales may require holes to be drilled.**
- Please follow the measurements for drilling holes if necessary.
- After holes have been drilled, please follow installation instructions.

IMPORTANT!
Measure from bottom of column, not floor or scale base.



Height Rod Installation

1. Remove the height rod, height rod brackets and hardware pack from the cardboard insert.
2. Attach the height rod brackets to the height rod using the four screws, lock washers and nuts enclosed in the hardware pack. Tighten all four screws.

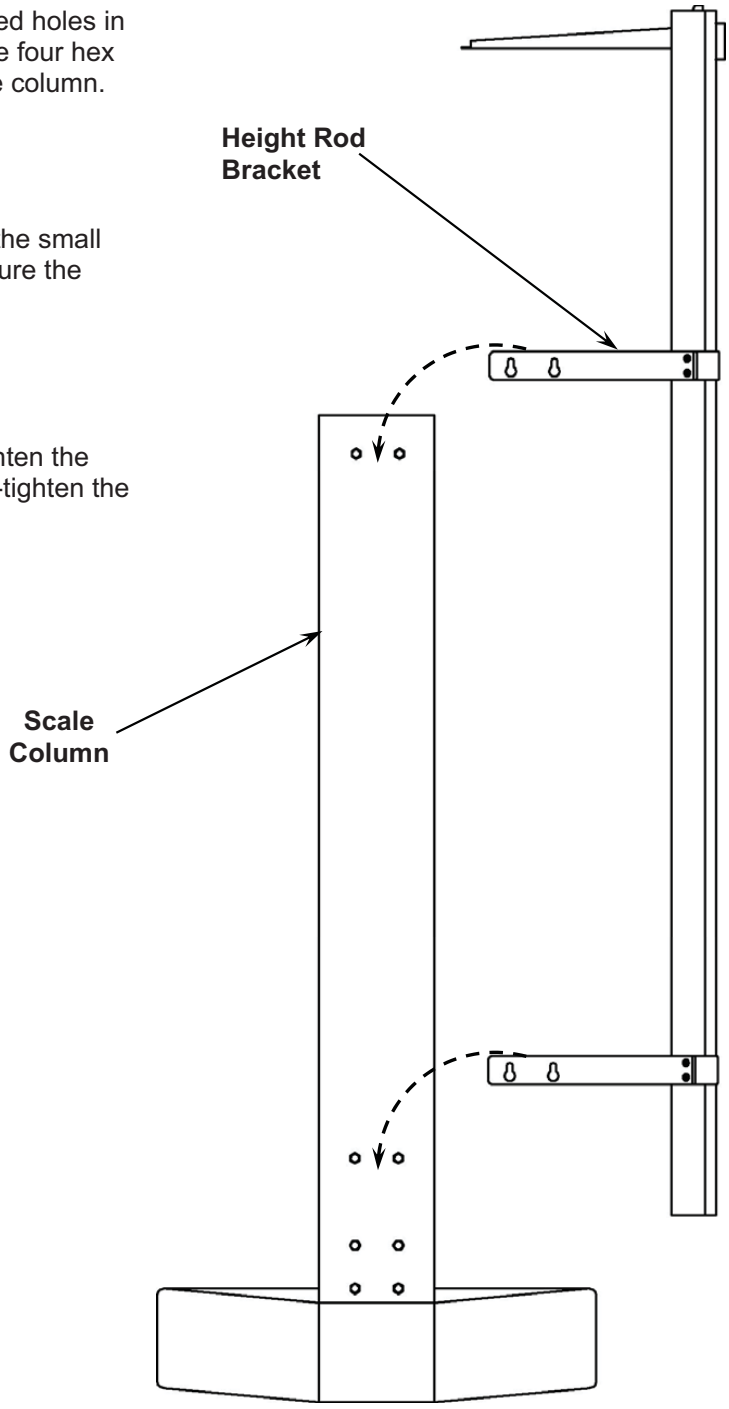


HEIGHT ROD INSTRUCTIONS, CONT.

3. Place the large end of the slotted holes in the height rod brackets over the four hex head screws on the back of the column.

4. Pull down to set the screws in the small end of the slotted hole and secure the bracket to the column.

5. Use the included wrench to tighten the hex head screws. Do not over-tighten the screws.



HEIGHT ROD INSTRUCTIONS, CONT.

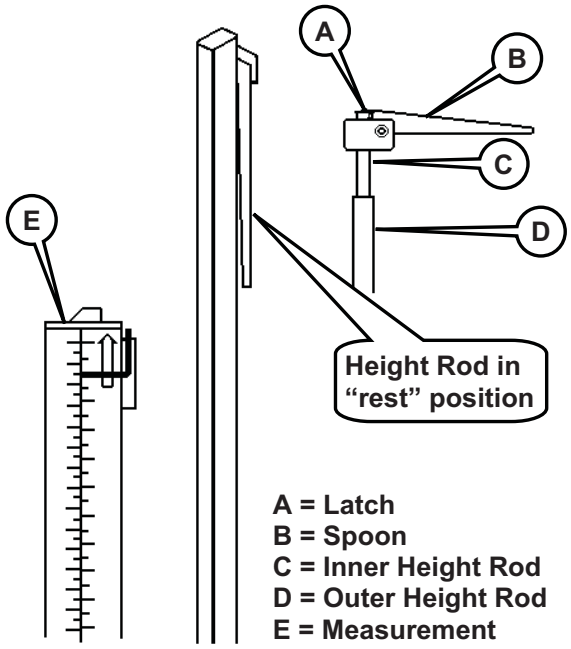
Height Rod Operating Guide

1. Before patient steps onto scale platform, spoon (B) should be rotated to horizontal position, and raised well above patient's apparent height.

2. Patient may now step onto scale platform. Spoon (B) should be held horizontal and above patient's head.

3. Carefully lower spoon (B), keeping it horizontal, until it rests gently on top of patient's head. If patient is shorter than 3' 4" (101.5 cm), push latch (A) to right while simultaneously pushing down on spoon (B), until the spoon (B) rests horizontally on top of patient's head.

4. Read height of patient as follows:
   - If back of spoon points to outer height rod, then it points to correct height.
   - If back of spoon points to inner height rod, then correct height is read at top of outer height rod (see "Read" arrow on outer height rod)..



A = Latch
B = Spoon
C = Inner Height Rod
D = Outer Height Rod
E = Measurement "Read" Line

5. While holding spoon (B) horizontally, raise spoon (B) above patient's head. Patient may now step off scale platform. Hold spoon (B) horizontal until patient is clear of height rod.

6. Rotate spoon (B) back to vertical position and adjust height rod back to rest position (i.e. spoon (B) should be locked in place within inner height rod (C) and inner rod should be at its lowest position).

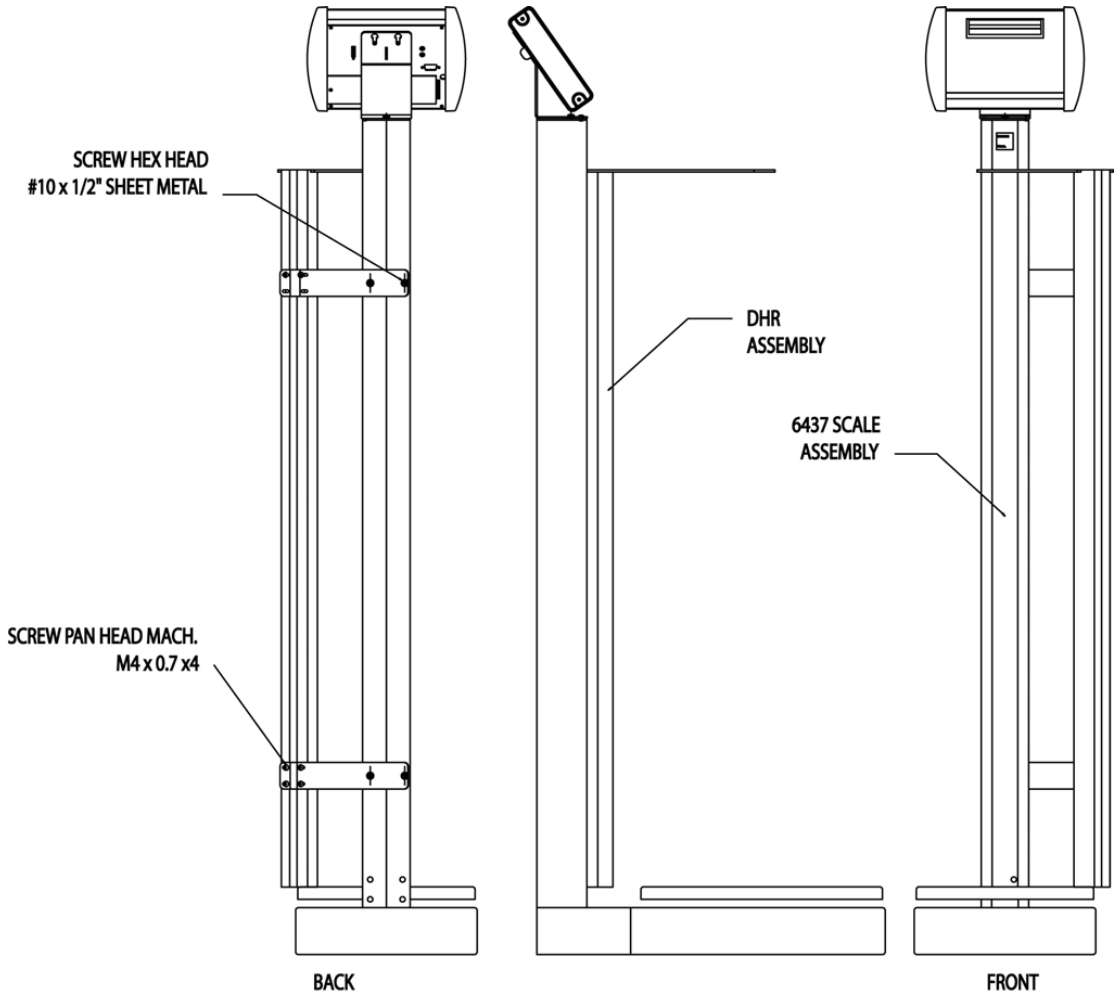
DIGITAL HEIGHT ROD INSTRUCTIONS

Digital Height Rod Installation

Before starting installation, please unpack carefully and remove all plastic wrappings, foam fillers and cardboard material. You should have the following components:

(1) Detecto Digital Height Rod (DHR)
(2) Mounting Brackets
(1) Hardware Pack, containing:
  (8) M4x0.7x4 Pan Head Machine Screws (bracket to height rod)
  (4) #10x1/2" Hex Head Sheet Metal Screws (bracket to column)

1. Align a mounting bracket with the holes in the height rod (near the headpiece) and install four (4) M4x0.7x4 Pan Head Machine screws to secure the bracket to the height rod.
2. Next, align the other mounting bracket with the lower holes in the height rod and install four (4) M4x0.7x4 Pan Head Machine screws to secure the bracket to the height rod.
3. Align the mounting bracket (near the headpiece) with the holes in the back of the column close to the display and install two (2) #10x1/2" Hex Head Sheet Metal screws to secure the bracket to the column.
4. Align the holes in the other bracket with the lower holes in the column and install two (2) #10x1/2" Hex Head Sheet Metal screws to secure the bracket to the column.
5. Connect the cable from the DHR to the port on the rear of the 758C indicator that is labeled height rod. Refer to the 758C Owner's Manual, 8555-M210-O1 for additional information.



DIGITAL HEIGHT ROD INSTRUCTIONS, CONT.

Measuring Patient's Height

IMPORTANT! Before performing the operations on this page, the digital height rod must be in its "starting position" (inner sliding tube must be down completely inside outer stationary tube and headpiece folded flat against stationary tube) prior to turning on the indicator. Otherwise, the error message 999.9 will be displayed.

1. Make sure height rod is in starting position.
2. Press **ON/OFF** key to turn indicator on.
3. Press **ZERO** key to zero weight display. ZERO, GROSS and lb, oz, kg or ST annunciator will turn on to show scale is ready for use. Note that height reading will show 3-7.3 **FT-INCHES** or 110.0 **cm** (depending on Unit= setting in Setup*).
4. Patient may now step onto scale platform.
5. Grasp height rod at hinge pin and raise it well above patient's head and then lift headpiece to horizontal position. Carefully lower height rod until headpiece rests on top of patient's head.

   NOTE: If the patient is under 3 ft, 7.3 in (110 cm) or over 6 ft, 7.1 in (201 cm) return the digital height rod to the "starting position" and manually* enter the patient's height.

Grasp at Hinge Pin

6. BMI will automatically be displayed with height.
7. Read weight, height and BMI displays.
8. While holding headpiece horizontal, raise height rod well above patient's head.
9. Patient may now step off scale platform.
10. Return height rod to starting position.
11. BMI display will clear when weight returns to zero.

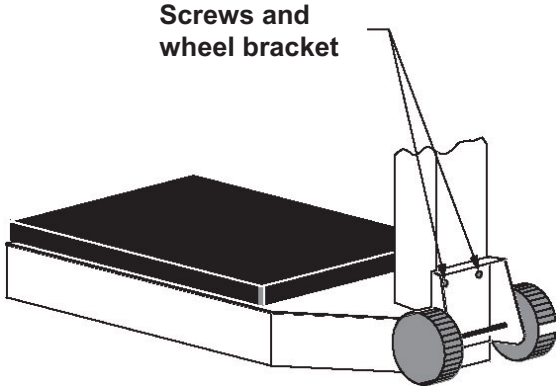
* **Refer to the 758C Owner's Manual, 8555-M210-O1 for additional information.**

OPTIONAL WHEELS INSTALLATION

How to Setup the Scale with Roller Wheels.

1. Remove the two lower screws in the back of the column.
2. Place the wheel bracket against the back of the column and align the holes in the bracket with the holes in the column.
3. Install the two screws removed in step 1, securing the wheel bracket to the column.

Screws and wheel bracket



ERROR AND STATUS DISPLAYS

Display	Meaning
-Err-	General error, invalid keypad entry was attempted.
-OF-	Attempting to display a negative number greater than –9,999 or a positive number greater than 99,999
-trL-	Indicates an attempt to zero a weight outside scale zero range. Refer to the Setup and Calibration trL: (Four Percent Zero Tracking Range Limit) parameter.
-UnS-	Motion is present when indicator is attempting to perform one of the following operations: Power Up, Zero, or Zero Weight Display
CAL Ib	Indicates calibration is necessary.
AdErr	Consult your scale service representative.
ErrA	
ErrAL	
ErrAH	
EE Err	
OCAP	Scale weight exceeds scale capacity
OFF	Displayed to indicate the indicator is turning off.

CARE AND CLEANING OF SCALE

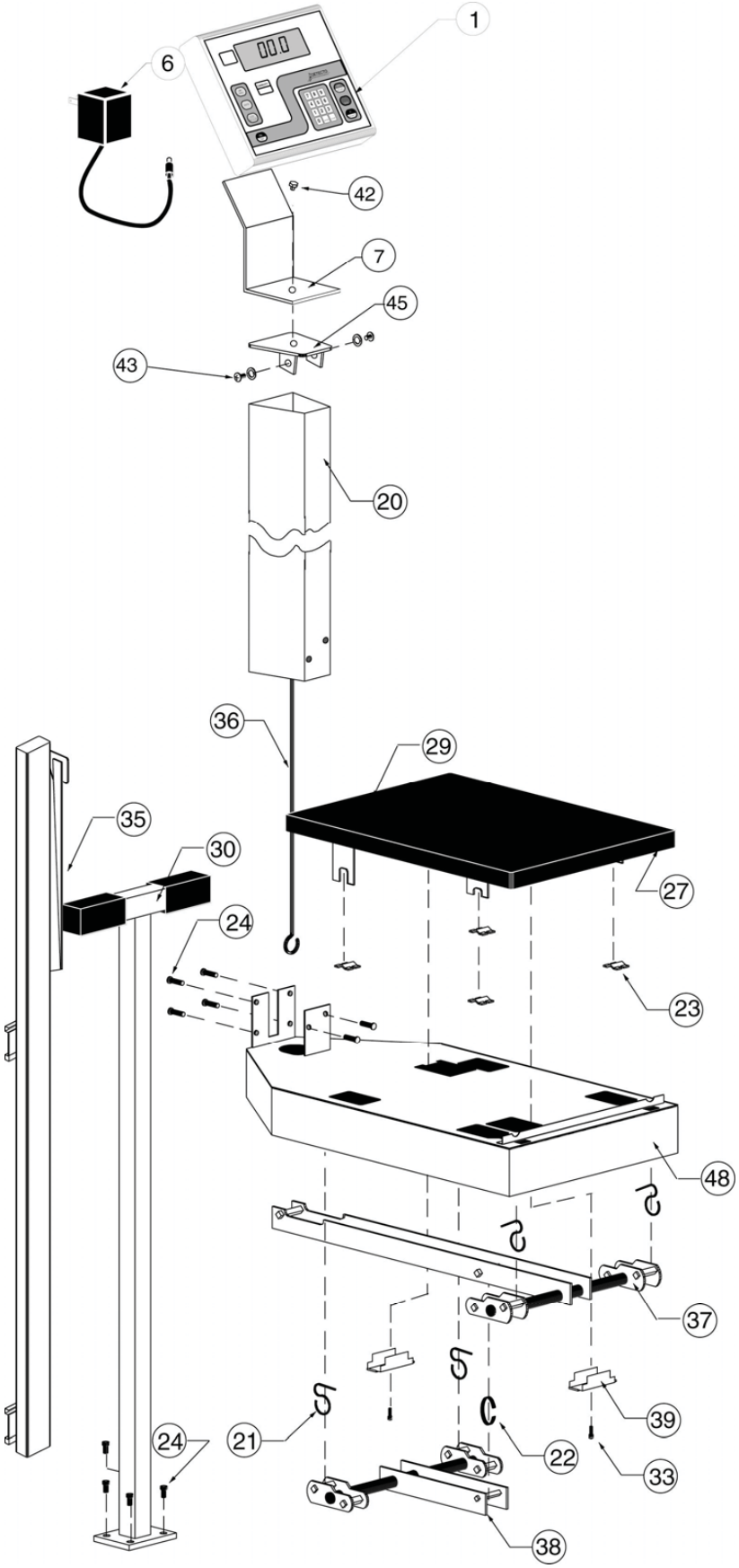
- **DO NOT** subject the platform to sudden shocks.
- **DO NOT** submerge indicator in water, pour or spray water directly on indicator.
- **DO NOT** use abrasive cleaners on this scale.
- **DO NOT** use acetone or other volatile solvents for cleaning.
- **DO** clean the scale and indicator using a damp soft cloth and mild detergent.
- **DO** avoid areas where the scale might be exposed to moisture.

PARTS IDENTIFICATION

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	758C	DIG. WT. IND. FOR CLINICAL SCALES
6	1	6800-1045	AC ADAPTER 100-240 VAC / 12 VDC @ 1A
7	1	0033-B163-0A	INDICATOR MOUNTING 6437/6439
20	1	0044-C180-1A	COLUMN ASSY W/ HOLES
21	4	3P8059	UNION HANGER
22	1	2U58	UNION CENTER HANGER
23	4	3P2087	PLATFORM LOAD BEARING
24	10	6021-1102	1/4 - 20 X 1/2 TRUSS HEAD SCREW
25	10	6024-1027	1/4 EXTERNAL TOOTH LOCK WASHER
26	4	63K1038	BASE LEG
27	1	3P2011X	PLATFORM WELDMENT
	1	3P511X	PLATFORM WELDMENT (HANDPOST)
29	1	3P868	PLATFORM COVER
	1	3P9068	PLATFORM COVER HANDPOST
30	1	0033-C106-1A	HAND POST ASSEMBLY
33	2	6021-1629	#10 X 1/2 HEX HEAD SHEET METAL SCREW
35	1	0033-D063-1A	HEIGHT ROD ASSEMBLY: 3P, INCH/CM
	1	0033-D475-1A	HEIGHT ROD ASSEMBLY: 3P, 1/4 INCH/1MM
36	1	0033-B256-08	DRAFT ROD 6439/6800 SCALES
37	1	3P8002X	LONG LEVER ASSEMBLY
38	1	3P8003X	SHORT LEVER ASSEMBLY
39	2	3P60	CHECK PLATE
42	1	6021-1454	SCW HEX HEAD 1/4 -20 X 3/4
43	2	6021-1045	SCW HEX HEAD #10-32 X 1/2 Z/P
	2	6024-0049	WASHER LOCK EXT #10
45	1	0033-B104-0A	TOP PLATE ASSY.
46*	1	709G2R1206	LOAD CELL & MOUNTING ASSEMBLY, Z-100
48	1	3P1001X	PLATFORM WELDMENT

* NOT SHOWN

PARTS IDENTIFICATION, CONT.



FCC COMPLIANCE STATEMENT

WARNING! This equipment generates uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 001-000-00315-4.

PROPER DISPOSAL

When this device reaches the end of its useful life, it must be properly disposed of. It must not be disposed of as unsorted municipal waste. Within the European Union, this device should be returned to the distributor from where it was purchased for proper disposal. This is in accordance with EU Directive 2002/96/EC. Within North America, the device should be disposed of in accordance with the local laws regarding the disposal of waste electrical and electronic equipment.

It is everyone's responsibility to help maintain the environment and to reduce the effects of hazardous substances contained in electrical and electronic equipment on human health. Please do your part by making certain that this device is properly disposed of. The symbol shown to the right indicates that this device must not be disposed of in unsorted municipal waste programs.

STATEMENT OF LIMITED WARRANTY

Detecto Scale warrants its equipment to be free from defects in material and workmanship as follows: Detecto warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of one **(1) year** from date of shipment. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** Detecto may choose to supply all necessary replacement parts and service during normal weekday working hours at no charge to the buyer.

After the first ninety (90) days Detecto will supply parts and service at the job site provided the owner agrees to pay the Dealer for all travel time, including mileage and test equipment, as well as any expenses incurred over the direct labor of the technician at the job site. This limited warranty honors only labor performed by Detecto authorized dealers.

This warranty does not apply to peripheral equipment not manufactured by Detecto; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

Detecto may require components be returned to the factory; they must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. Detecto accepts no responsibility for loss or damage in transit.

STATEMENT OF LIMITED WARRANTY

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:
A.) Has been tampered with, defaced, mishandled or have had repairs and modifications not authorized by Detecto.
B.) Has had serial number altered, defaced, or removed.
C.) Has not been grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. Detecto will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those Detecto products installed in the forty-eight (48) contiguous continental United States.

DETECTO
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DESIGNED & MANUFACTURED
IN U.S.A.